

CLAIMS

1. A method of forming a post spacer (25, 38, 39, 40) for a liquid crystal cell (26), comprising:

5 depositing a first photosensitive colour filter material (15) on a substrate;

aligning a first photomask (16) between the substrate (14) and a light source, said first photomask comprising one or more regions that are transparent to the light produced by the light source, one or more regions that are opaque to said light and at least one half-tone region, so that a desired 10 location of the post spacer (25) is shielded by an opaque region;

exposing the first photosensitive colour filter material (15) to said light; and

removing exposed first photosensitive colour filter material from 15 the substrate (14).

2. A method according to claim 1, wherein the first photomask (16) is aligned with the substrate (14) so that a desired location of a first colour filter is exposed to light transmitted through a half-tone region.

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3. A method according to claim 1 or 2, further comprising:

depositing a second photosensitive colour filter material (23) on the substrate;

aligning a second photomask (20) between the substrate (14) 25 and a light source, said second photomask (20) comprising one or more regions that are transparent to the light produced by the light source and one or more regions that are opaque to said light, so that the desired location of the post spacer (25) is shielded from the light by an opaque region of the second photomask;

30 exposing the second photosensitive colour filter material (23) to light; and

removing exposed second photosensitive colour material from the substrate (14).

4. A method according to claim 3, wherein the second photomask 5 (20) comprises half-tone regions and is aligned with the substrate (14) so that a desired location of a second colour filter is exposed to light transmitted through a half-tone region.

5. A post spacer (25, 38, 39, 40) formed using the method of any 10 one of claims 1 to 4.

6. A display having a liquid crystal cell (26) comprising one or more post spacers according to claim 5.

15 7. A liquid crystal cell (26) according to claim 6, further comprising an array of pixels (A-F) arranged in rows and columns, wherein the post spacer (25, 38, 39, 40) is located at a row/ column intersection.

8. A liquid crystal cell (26) according to claim 6, wherein the post 20 spacer (25, 38, 39, 40) is located over a thin film transistor.

9. A photomask (16) for use in conjunction with a light source for forming a colour filter and at least part of a post spacer (25, 38, 39, 40) for a liquid crystal cell (26), comprising one or more regions that are transparent to 25 the light produced by the light source, one or more regions that are opaque to said light and at least one half-tone region which transmits only a limited proportion of said light.